## FIGURE 1

GCTCCCAGCCAAGAACCTCGGGGCCGCTGCGCGGTGGGGAGGAGTTCCCCGAAACCCGGCCG CTAAGCGAGGCCTCCTCCCCGCAGATCCGAACGGCCTGGGCGGGGTCACCCCGGCTGGGA GGTGTGAGTGGGTGTGTGCGGGGGGGGGGGGGTTGATGCAATCCCGATAAGAAATGCTCGGG TGTCTTGGGCACCTACCCGTGGGGCCCGTAAGGCGCTACTATATAAGGCTGCCGGCCCGGAG CCGCCGCGCCGTCAGAGCAGGAGCGCTGCGTCCAGGATCTAGGGCCACGACCATCCCAACCC GGCACTCACAGCCCCGCAGCGCATCCCGGTCGCCCCAGCCTCCCGCACCCCCATCGCCGG  ${\tt AGCTGCGCCGAGAGCCCCAGGGAGGTGCC}$  ${ t ATCCTGGCCGGCCTCTGGCTGGCCGTGGCCGCCCCCTCGCCTTCTCGGACGCGGGGCCC}$ CCACGTGCACTACGGCTGGGGCGACCCCATCCGCCTGCGGCACCTGTACACCTCCGGCCCCC ACGGGCTCTCCAGCTGCTTCCTGCGCATCCGTGCCGACGCGTCGTGGACTGCGCGCGGGGC CAGAGCGCGCACAGTTTGCTGGAGATCAAGGCAGTCGCTCTGCGGACCGTGGCCATCAAGGG CGTGCACAGCGTGCGGTACCTCTGCATGGGCCGCCGACGGCAAGATGCAGGGGCTGCTTCAGT ACTCGGAGGAAGACTGTGCTTTCGAGGAGGAGATCCGCCCAGATGGCTACAATGTGTACCGA TCCGAGAAGCACCGCCTCCCGGTCTCCCTGAGCAGTGCCAAACAGCGGCAGCTGTACAAGAA CAGAGGCTTTCTTCCACTCTCATTTCCTGCCCATGCTGCCCATGGTCCCAGAGGAGCCTG AGGACCTCAGGGGCCACTTGGAATCTGACATGTTCTCTTCGCCCCTGGAGACCGACAGCATG TGCTTCTACAAGAACAGTCCTGAGTCCACGTTCTGTTTAGCTTTAGGAAGAAACATCTAGAA GTTGTACATATTCAGAGTTTTCCATTGGCAGTGCCAGTTTCTAGCCAATAGACTTGTCTGAT CATAACATTGTAAGCCTGTAGCTTGCCCAGCTGCTGGGCCCCCATTCTGCTCCCTCGA GGTTGCTGGACAAGCTGCTCGCTCTCAGTTCTGCTTGAATACCTCCATCGATGGGGAAC TCACTTCCTTTGGAAAAATTCTTATGTCAAGCTGAAATTCTCTAATTTTTTCTCATCACTTC CCCAGGAGCAGCCAGAAGACAGGCAGTAGTTTTAATTTCAGGAACAGGTGATCCACTCTGTA AAACAGCAGGTAAATTTCACTCAACCCCATGTGGGAATTGATCTATATCTCTACTTCCAGGG GCTTCAGGAGTAGGGGAAGCCTGGAGCCCCACTCCAGCCCTGGGACAACTTGAGAATTCCCC CTGAGGCCAGTTCTGTCATGGATGCTGTCCTGAGAATAACTTGCTGTCCCGGTGTCACCTGC TTCCATCTCCCAGCCCACCAGCCCTCTGCCCACCTCACATGCCTCCCCATGGATTGGGGCCT CCCAGGCCCCCACCTTATGTCAACCTGCACTTCTTGTTCAAAAATCAGGAAAAGAAAAGAT TTGAAGACCCCAAGTCTTGTCAATAACTTGCTGTGTGGAAGCCGGGGGAAGACCTAGAAC TTTTGTATATTAAAATGGAGTTTGTTTGT

## FIGURE 2

MRSGCVVVHVWILAGLWLAVAGRPLAFSDAGPHVHYGWGDPIRLRHLYTSGPHGLSSCFLRI RADGVVDCARGQSAHSLLEIKAVALRTVAIKGVHSVRYLCMGADGKMQGLLQYSEEDCAFEE EIRPDGYNVYRSEKHRLPVSLSSAKQRQLYKNRGFLPLSHFLPMLPMVPEEPEDLRGHLESD MFSSPLETDSMDPFGLVTGLEAVRSPSFEK

signal peptide:
amino acids 1-22

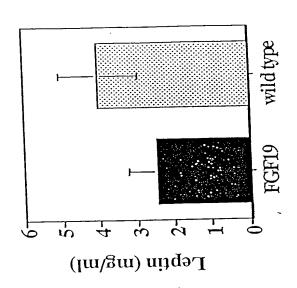
N-myristoylation sites: amino acids 15-21, 54-60, 66-72, 201-207

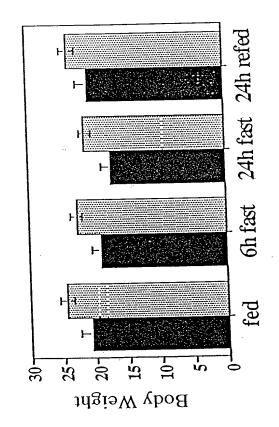
Prokaryotic membrane lipoprotein lipid attachment site: amino acids 48-59

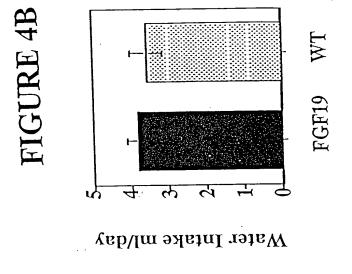
HBGF/FGF domain:
amino acids 80-131

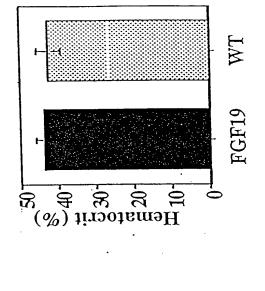
FIGURE 3B

FIGURE 3A









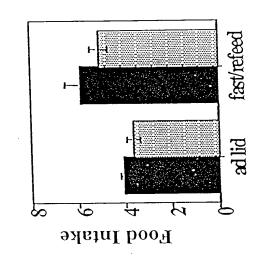
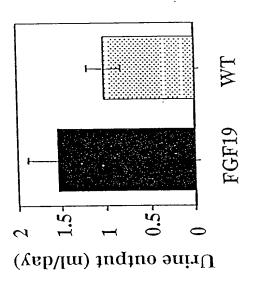


FIGURE 4A



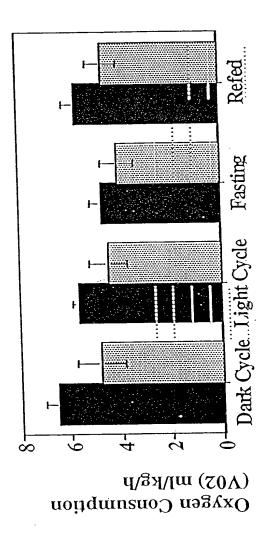


FIGURE 6A FIGURE 6B

Tris (m)

Tris (m)

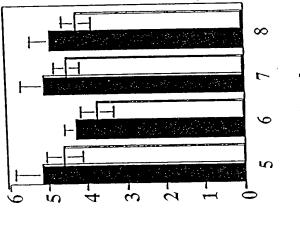
Tris (m)

Tric (m)

Tric

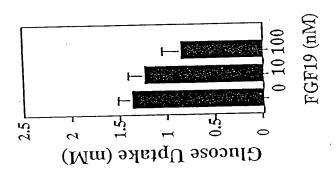
food intake (g/d)

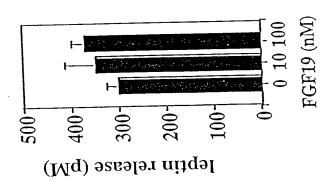
Oxygen Consumption (VO2) C



infusion day

3d 3n 4d 4n 5d 5n infusion day





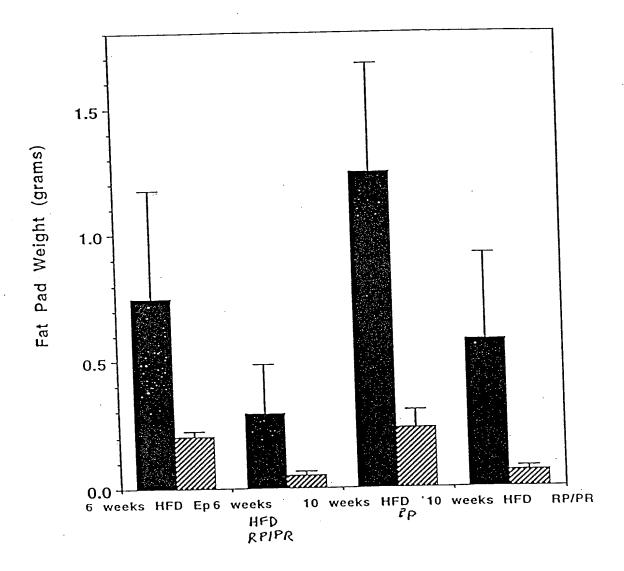


FIGURE 9

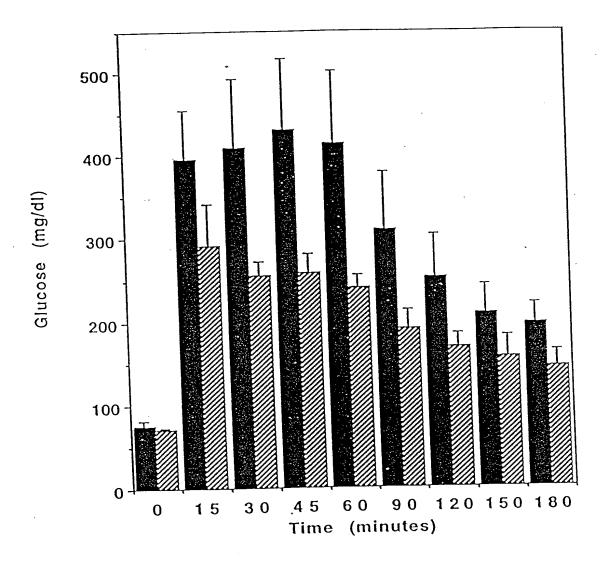
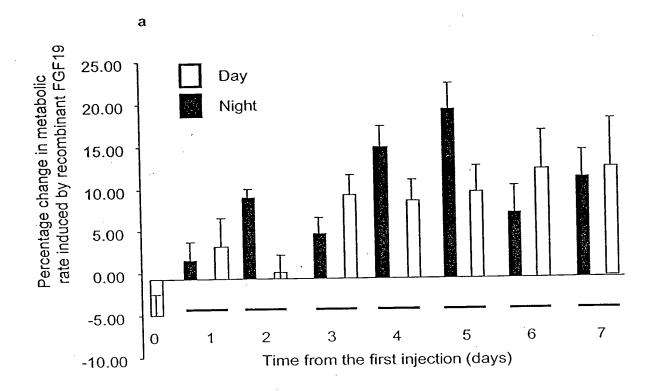
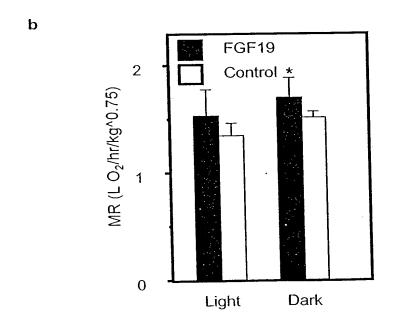


FIGURE 10.

Fig. 11





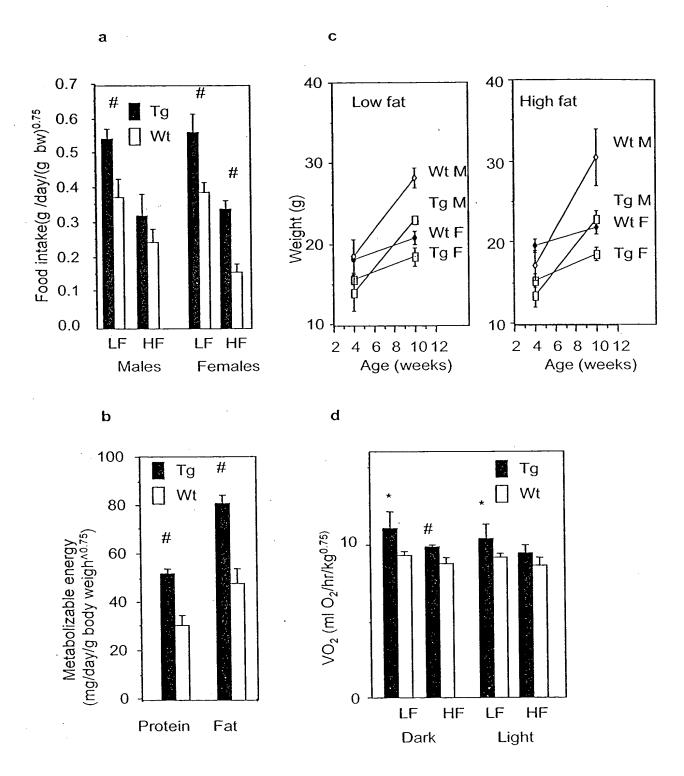
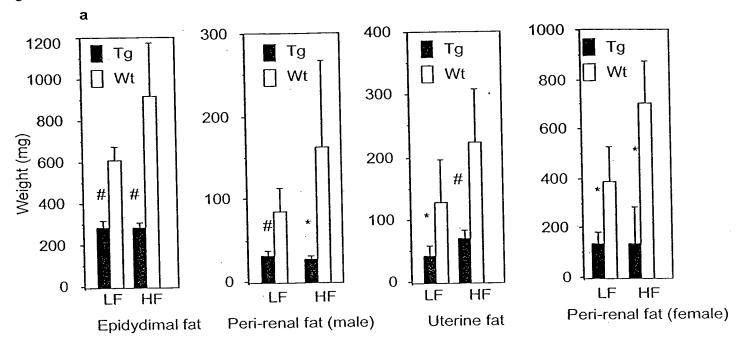
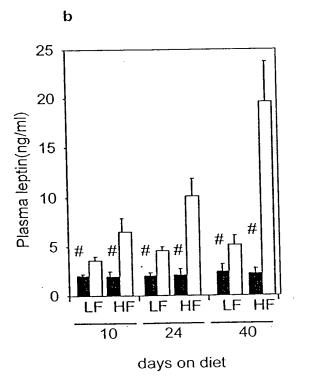


Fig. 13





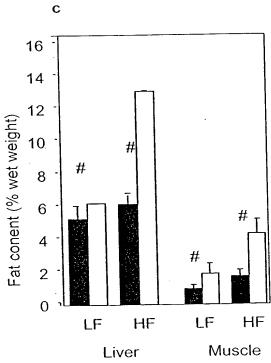
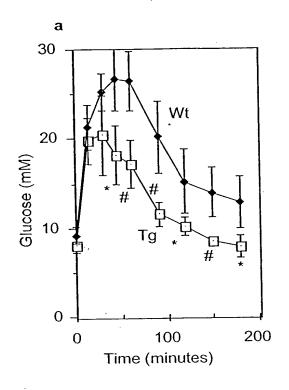
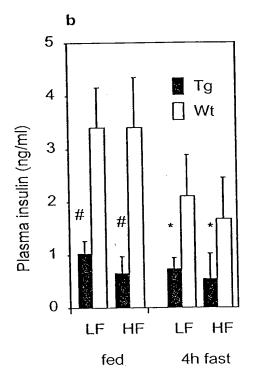
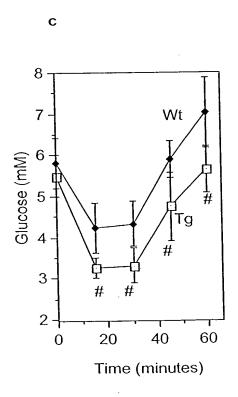


Fig. 14.







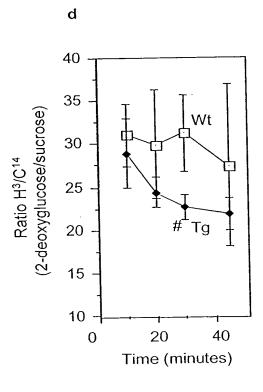
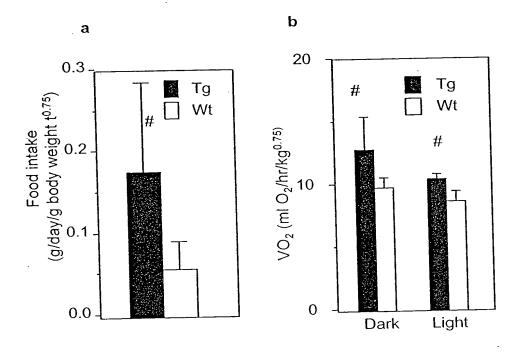
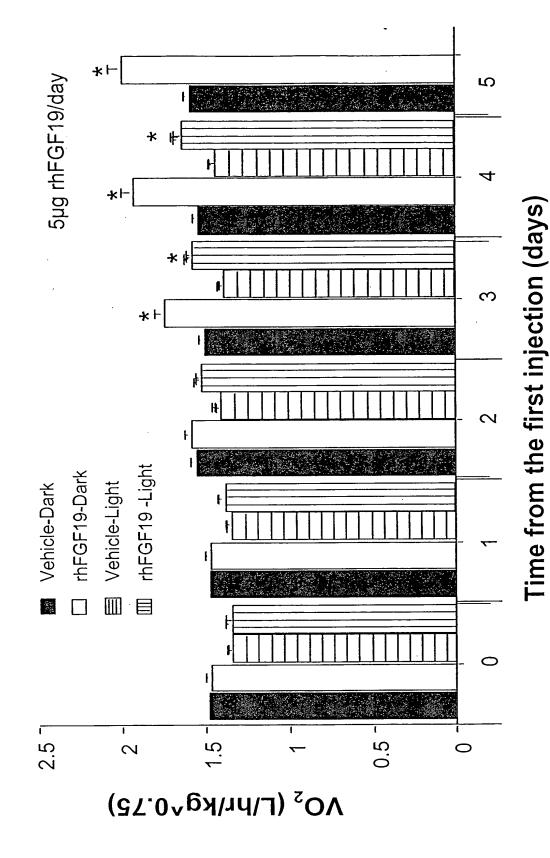


Fig. 15.



## Figure 17



\*P < 0.05 vs Vehicle controls with the same cycle on the same day

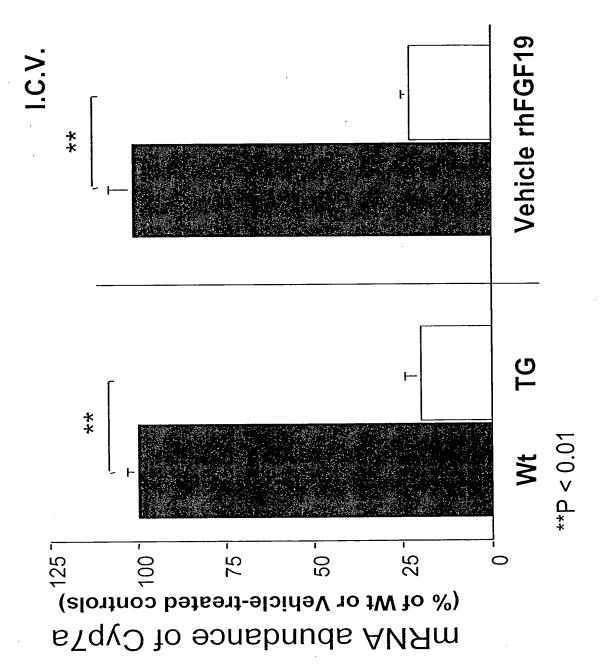
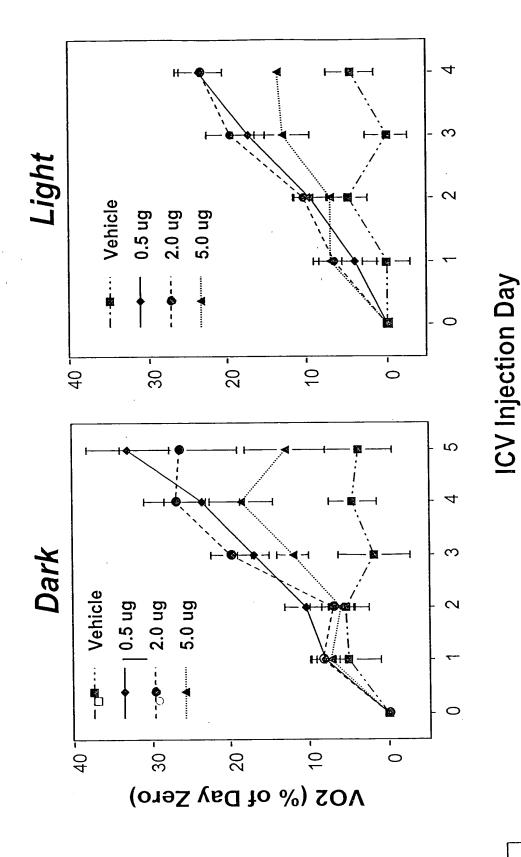


Figure 19



## Figure 20

			rhFGF19	
	Vehicle	5.0 µg	2.0 µg	0.5 µg
NPY	1.0 +/- 0.08	0.81 +/- 0.23	0.63 +/-0.20	0.40 +/- 0.08
AgRP	1.0 +/- 0.33	0.26 +/- 0.10	0.57 +/- 0.26	0.29 +/- 0.16
POMC	1.0 +/- 0.27	1.49 +/- 0.42	3.48 +/- 1.5	38.77 +/- 3.32
MC4-R	1.0 +/- 0.16	0.47 +/- 0.09	0.70 +/- 0.10	0.48 +/- 0.08